[J3] ADDING NATURAL FREQUENCY DATA TO A DECISION AID FOR COLORECTAL CANCER SCREENING: RESULTS OF A RANDOMIZED TRIAL

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Purpose: Guidelines recommend that decision aids provide natural frequency data regarding baseline risk, risk reduction, and chances of false positives and negatives. Such quantitative information may confuse patients, especially those with low numeracy. We conducted a randomized trial to compare effects of 2 colorectal cancer (CRC) screening decision aids—one with and one without natural frequency data.

Methods: 108 patients, aged 50–75 years, who were at average risk for CRC and due for screening were recruited from primary care clinics. All subjects viewed a CRC screening decision aid (without numbers), and half (n = 56) were randomized to view natural frequency data for 2 common screening tests. Participants completed questionnaires before and after viewing the decision aid that assessed subjective CRC risk, intent to be screened, and decisional conflict. At 6 months, screening behavior was assessed.

Results: Members of both groups showed significant increases in subjective CRC risk, intent to be screened, intent to undergo fecal immunochemical testing (FIT), intent to undergo colonoscopy, and reduction in overall decisional conflict score (all P \ 0.01). However, no significant between-group differences in change scores were observed.

Numeracy was a significant moderator. Among participants with numeracy scores higher than the median, those who viewed the natural frequency data had a significantly smaller increase in subjective CRC risk than those who did not view natural frequency data (20.09 v. 0.81, respectively, P = .009), and significantly greater intent to undergo FIT (1.00 v. 0.1, respectively, P = .01). However, for those with numeracy scores lower than the median, no significant between-group differences were seen.

At 6 months, a higher proportion of patients who viewed the natural frequency data had completed CRC screening compared to those who did not; however, this difference was not significant (39.3% v. 26.9%, P = 0.173). Among patients with numeracy scores higher than the median, a higher uptake of FIT was observed among those who viewed the natural frequency data that approached significance (12.1% v. 0%, P = 0.148); there were no significant between-group differences for those with below- median numeracy.

Conclusions: Adding natural frequency data to a decision aid had a significant effect but only for patients with higher numeracy scores. More research is needed before making recommendations to present such data to all patients.

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